FARAGO, Gyorgy, HA 5 BG

Untuned balancer and impedance transformer for short waves.
Radiotechnika 13 no.7:262-263 Jl '63.

FARAGO, Gyorgy (HA 5 BG)

Ultrashort wave transmission lines. Radiotechnika 13 no.9:332-333 S '63.

FARAGO, Gyorgy (HA 5 BG)

A significant meeting of radio amateurs in Gottwaldov. Radiotechnika 13 no.9:336-337 S '63.

FARAGO, Gyorgy (HA 5 BG)

Supply lines in shortwave transmission technique. Radiotechnik.
13 no.10:372-373 O '63.

FARAGO, Gyorgy (HA 5 BG) I. osztalyu rovidhullamu amator

Personal QSO with the Dresden amateur radio operators. Radio-
technika 13 no.11:414-415 N '63.

FARAGO, Gyorgy, (HA 5 BG)

Feeders in the shortwave transmission. Radiotechnika 13 no.12:
454-455 D '63.

FARAGO, Gyorgy, (HA 5 BG)

Problems relating to modern amateur transmitters. Pt.1.
Radiotechnika 14 no.2: 54-56 F'64.

FARAGO, Gyorgy (HA 5 BG) I. oszt.minositesu robidhullamu amator

Coil assembly made in the German Democratic Republic for shortwave band receivers. Radiotechnika 14 no. 3:94-95 Mr '64.

Problems of modern amateur transmitters. Pt. 2. Ibid.:96-97.

FARAGO, Gyorgy, HA 5 BG

Problems relating to modern amateur radio transmitters. Pt. 3.
Radiotechnika 14 no. 4:134-135 Ap '64.

FARAGO, Gyorgy, (HA 5 BG)

Problems of modern radio transmitters. Pt. 4. Radiotechnika
14 no. 5:170-172 My '64.

FARAGO, Gyorgy (HA 5 BG), I.oszt.minositesu rovidhullamu amator

Problems of modern amateur transmitters. Pt. 5. Radiotechnika
14 no. 6:212-214 Je '64.

BARANAY, Gyorgy, (HA 5 BG)

Problems of modern amateur transmitters. Pt.6. Radiotechnika 14
no.7:252-253 Jl '64.

HIDVEGI, Tibor; FARAGO, Gyorgy (HA 5 BG)

For modernizing amateur transmitters. Radiotechnika 15 no.7: 259-262 Jl '65.

1. Editorial Board Member, "Radiotechnika."

FARAGO, I.

On the origin and manifestations of narcotic diseases.
Magy. belorv. arch. 4 no.2:88-93 1951.   (CIML 20:11)

1. Doctor. 2. Neurological and Psychiatric Clinic (Director
Prof. Dr. Gyula Nyiro), Budapest Medical University.

FARAGO, I.

Syndrome of intervertebral disk hernia and multiple sclerosis. Magy.
belorv. arch. 5 no.3:133-136 Sept 1952.   (CIML 25:5)

1. Doctor. 2. Psychiatric and Neurological Clinic (Director -- Prof.
Dr. Gyula Nyiro), Budapest Medical University.

FARAGO, I.

Narcomania, narcotic diseases. Orv. hetil. 93 no. 46:1312-1316
16 Nov 1952.   (CIML 24:1)

1. Doctor. 2. Psychiatric and Neurological Clinic (Director -- Prof.
Dr. Gyula Nyiro), Budapest Medical University.

FARAGO, Istvan, dr.; KAZAR, Gyorgy, dr.

Connections of the early syndrome of skull injuries to later
conditions; observations in 366 cases. Ideg. szemle 8 no.5:
152-156 Oct 55.

1. A Budapesti Orvostudomanyi Egyetem III. sz. Sebeszeti
Klinikaja Tarumatologiai Intesete (igasgato: Rubanyi Pal dr.
egyetemi tanar) es Ideg Elme Klinikaja (igasgato: Nyiro Gyula
dr. egyetemi tanar) koslemenye.
        (HEAD, wounds & inj.
            closed head inj., early & late neurotic & psychotic
            sympt. (Hun))
        (WOUNDS AND INJURIES
            head, closed inj., early & late neurotic & psychotic
            sympt. (Hun))

KULCSAR, Andor, dr.; MADOR, Gyorgy, dr.; ZOLCZER, Laszlo, dr.;
FARAGO, Istvan, dr.; MOLNAR, Edit, dr.

Clinical aspects and therapy of commotio cerebri. Magy.
Sebeszet 10 no.1:4-13 Mar 57.

1. A Budapesti Orvostudomanyi Egyetem Baleseti Sebeszeti
Intezetenek Kozlemenye. Igazgato: Rubanyi, Pal, dr. egyetemi
tanar.
    (BRAIN, wounds & inj.
        concussion, ther. & other clin. aspects (Hun))

FARAGO, J

32. Condensers in refrigerating plants, by J. Farago. ("Magyar Energiagazdasag" -- *Power Economy in Hungary* -- Vol. III, No. 7-12, pp. 143-146, July-Dec., 1950, 2 figs.)

It was customary for domestic plants to erect the ammonia condensers of refrigerating plants in the open in the form of tower condensers, since their construction is less expensive than the horizontal baffled counterflow shell and tube condenser. Compared to the latter system, however, the temperature of condensation is higher and more pumping is required with tower condensers. On the basis of a practical example giving comparative figures for the two systems (assuming that the cooling tower has a cooling capacity of 400,000 cal) it is shown that the tower condenser requires 12 per cent more energy for the actual cooling besides necessitating the circulation of considerable additional amounts of water, which, in turn, increases the work of the water circulating pump. Applied to the above example, the cooling effect due to evaporation in the tower is at best less than 3,000 cal/hr, that is, 0.75 per cent of the 400,000 cal cooling capacity. On the other hand, it can be stated, however, that the use of the tower condensers is justified where cooling water is abundant, energy cheap, and where investment must be kept low.

FARAGO, Janos, VI. oh.

Iodine reaction in pregnancy. Orv. hetil. 96 no.5:123-124 30
Jan 55.

1. A Fovarosi Tanacs Egeszegugyi Intezmenyei XI. Szakorvosi
Rendelointezet (igazgato: Kiralyhegyi Robert dr.) Nogyogyaszati
Osztalyanak (foorvos: Pauncs Tivadar dr.) kozlemenye.
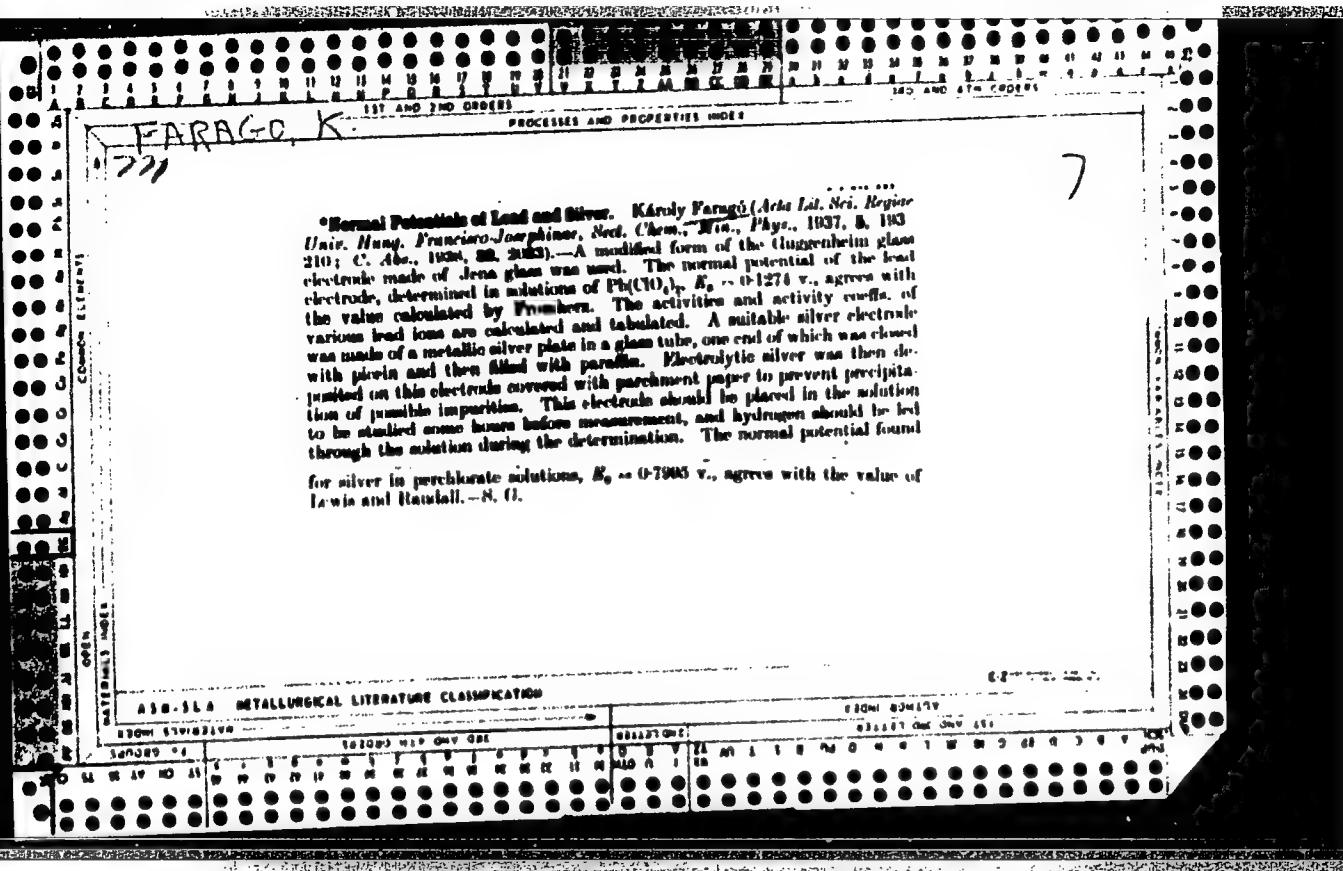   (IODINE,
            test in pregn.)
        (PREGNANCY TESTS,
            iodine reaction)

FARAGO, Janos, dr.

Phenothiazines in combined obstetrical analgesia. Magy. noorv. lap.
25 no.2:102-105 Mr '62.

1. BM. Korvin Otto korhaz szuleszeti-nogyogyaszati osztalyanak
(Foorvos: Fabian Laszlo dr.) kozlemenye.

(PHENOTHIAZINES ther)   (ANESTHESIA OBSTETRICAL)

FARAGO, K.

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

7

*Normal Potentials of Lead and Silver. Károly Faragó (Acta Lit. Sci. Regiæ Univ. Hung. Francisco-Josephinæ, Sect. Chem., Min., Phys., 1937, 5, 193–210; C. Abs., 1938, 32, 2083).—A modified form of the Guggenheim glass electrode made of Jena glass was used. The normal potential of the lead electrode, determined in solutions of $Pb(ClO_4)_2$, $E_0 = 0.1274$ v., agrees with the value calculated by Prumbers. The activities and activity coeffs. of various lead ions are calculated and tabulated. A suitable silver electrode was made of a metallic silver plate in a glass tube, one end of which was closed with picein and then filled with paraffin. Electrolytic silver was then deposited on this electrode covered with parchment paper to prevent precipitation of possible impurities. This electrode should be placed in the solution to be studied some hours before measurement, and hydrogen should be led through the solution during the determination. The normal potential found

for silver in perchlorate solutions, $E_0 = 0.7993$ v., agrees with the value of Lewis and Randall.—N. O.

METALLURGICAL LITERATURE CLASSIFICATION

FARAGO, Kalman

Data on the question of planning residential area units. Magy
ep ipar 12 no.8:379-383 '63.

FARAGO, Katlin, dr.; HAJOS, Endre, dr.

Simultaneous tomography. Magy. radiol. 8 no.2:104-106 May 56.

1. A Budapesti Orvostudomanyi Egyetem Rontgenklinikajanak
(Igazgato: Ratkoczy, Mandor, dr. egyet. tanar) kozlemenye.
    (ROENTGENOGRAPHY
        tomography, simultaneous of several layers, new
        technic (Hun))

FARAGO, Katalin, dr.; GIMES, Bela, dr.

Radiotherapy of myasthenia gravis pseudoparalitica. Orv.hetil.
100 no.48:1732-1734 N '59.

1. A Budapesti Orvostudomanyi Egyetem Rontgenklinikajanak
(igazgato: Ratkoczy Nandor dr. egyetemi tanar) kozlemenye.
(MYASTHENIA GRAVIS radiother)

FARAGO, L.

Significance of sternal puncture in dermatology. Borgyogy vener. szemle
5 no.6:168-171 Dec 51.   (CIML 21:4)

1. Doctor. 2. Skin and Venereal Diseases Clinic (Director—Prof. Dr.
Ferenc Foldvari), Budapest University.

KAJTOR, Ferenc; FARAGO, Lajos; TOROK, Pal

Effect of peripheral sensory stimulation on the convulsive activity
of the hippocampus in evipan anesthesia. Ideg szemle 10 no.5-6:171-180
Oct-Dec 57.

1. A Debreceni Orvostudomanyi Egyetem Ideg-elmeklinikajanak kozlemenye.
          (HIPPOCAMPUS, in various dis.
                  epilepsy, temporal, EEG of hippocampal responses to
                  sensory stimulation of peripheral nerves in hexobarbital
                  anesth. (Hun))
          (EPILEPSY, physiol.
                  EEG of hippocampal responses to sensory stimulation of
                  peripheral nerves in hexobarbital anesth. in temporal
                  epilepsy (Hun))
          (ELECTROENCEPHALOGRAPHY, in various dis.
                  epilepsy, temporal, EEG of hippocampal responses to
                  sensory stimulation of peripheral nerves in hexobarbital
                  anesth. (Hun))
          (NERVES, PERIPHERAL, in various dis.
                  same)

HULLAY; Jozsef; FARAGO; Lajos; TOROK; Pal

Data on memory functions based on electric cortical stimulations in
temporal epilepsy. Ideg. szemle 11 no.1-2:15-17 Feb-Apr 58.
　　　　(MEMORY,
　　　　　　　funct. of memory cortex studies by electric cortical
　　　　　　　stimulations in temporal epilepsy (Hun))
　　　　(CEREBRAL CORTEX, physiol.
　　　　　　　memory cortex funct. studied by electric cortical stim-
　　　　　　　ulations in temporal epilepsy (Hun))

EXCERPTA MEDICA Sec 13/Vol 13/1 Dermatology Jan 59

210. KAPOSI'S SARCOMA - Sarcome de Kaposi - Farago L. Budapest -
ANN. DERM. SYPH. (Paris) 1958, 85/3 (297-298) Illus. 2

Case report.   (XIII, 5, 16)

FARAGO, Laszlo, dr.

"The process of thinking and the regularities of analysis, synthesis, and generalization," edited by S.L.Rubinshteyn. Reviewed by Laszlo Farago. Magy pszichol szemle 18 no.3:374-376 '61.

FARAGO, Laszlo, tanszekvezeto

International symposium on teaching mathematics held in Budapest.
Magy tud 69 no.12:784-788 D '62.

1. Orszagos Pedagogiai Intezet.

FARAGO, Laszlo, dr.

Psychological problems relating to the up-to-date teaching of
mathematics. Magy pszichol szemle 20 no.3:441-448 '63.

1. Orszagos Pedagogiai Intezet.

HUNGARY

FARAGO, Dr Laszlo, and HOLCZINGER, Dr Laszlo, Ear-Nose-Throat Department (Orr-Gege-Fulosztaly) of the National Institute of Oncology (Orszagos Onkologiai Intezet) and Research Institute for Oncopathology (Onkopathological Research Institute).

"Tumors of the Salivary Glands"

Abstract [Authors' English summary, modified]: After subjecting to pathological and clinical consideration tumors originating from the salivary glands of the oral cavity, authors discuss 17 of their own cases diagnosed and treated during 1956-1965. Their cases were mostly localized in the palate. Eleven cases of pleomorphic adenomas, 1 pleomorphic adenoma with malignant development, 4 adenocarcinomas, 1 mucoepidermoid tumor were treated. Combined therapy is considered to be the most effective method of treatment. Of the 12 patients with pleomorphic adenoma, 9 survived for more than 5 years, 2 survived for more than 3 years, 1 died after having been free of symptoms for two years; of the 4 cases of adenocarcinoma there were 3 relapses, including one after 9 years; 2 are alive and 2   died. A patient with mucoepidermoid tumor has been free of symptoms for two years. 41 References, mainly Western.

FARAGO, M.

FARAGO, M. - The use of a color filter in microphotography. p. 90.
        Vol. 2, no. 4, Aug. 1956
        Kep es Hangtechnika. Budapest, Hungary

FARAGO, M.

The cell wall. p. 8. (Magyar Mezogazdasag, Vol. 11, no. 3, Feb. 1956 Budapest)

SO: Monthly List of East European Accession (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

FARAGO, M.

FARAGO, M. Plants resistant to freezing. p. 11
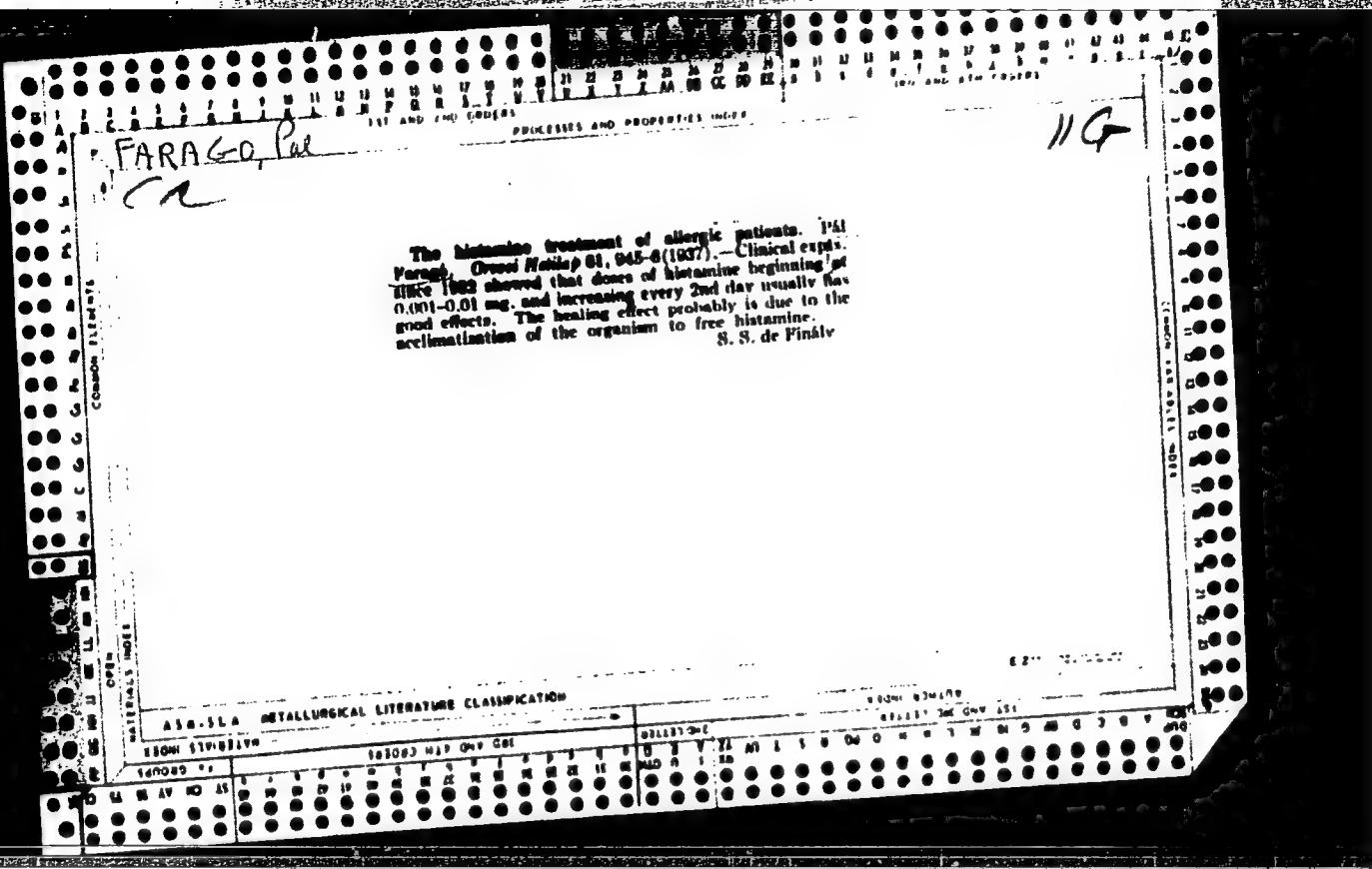
Vol. 11, no. 8, A pr. 1956
MAGYAR MEZOGAZDASAG
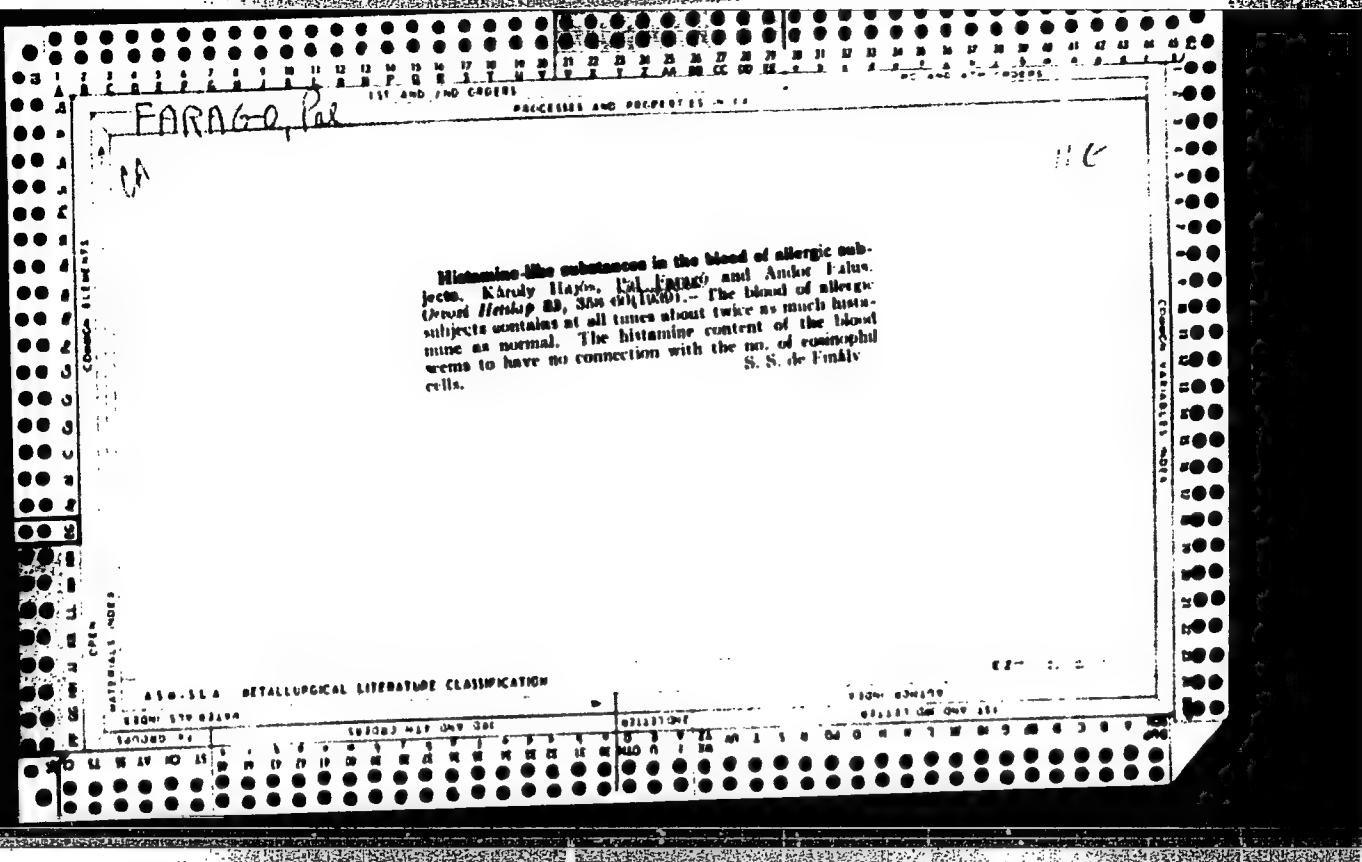AGRICULTURE
Budapest, Hungary

So: East European Accession, Vol. 6, No. 3, March 1957

FARAGO, Mihaly, dr. (Fertod); HORVATH, Karoly (Pecs, Alkotmany u.20);
KINDLER, Andras

    Miscellany. Radiotechnika 11 no.11:341 N '61.

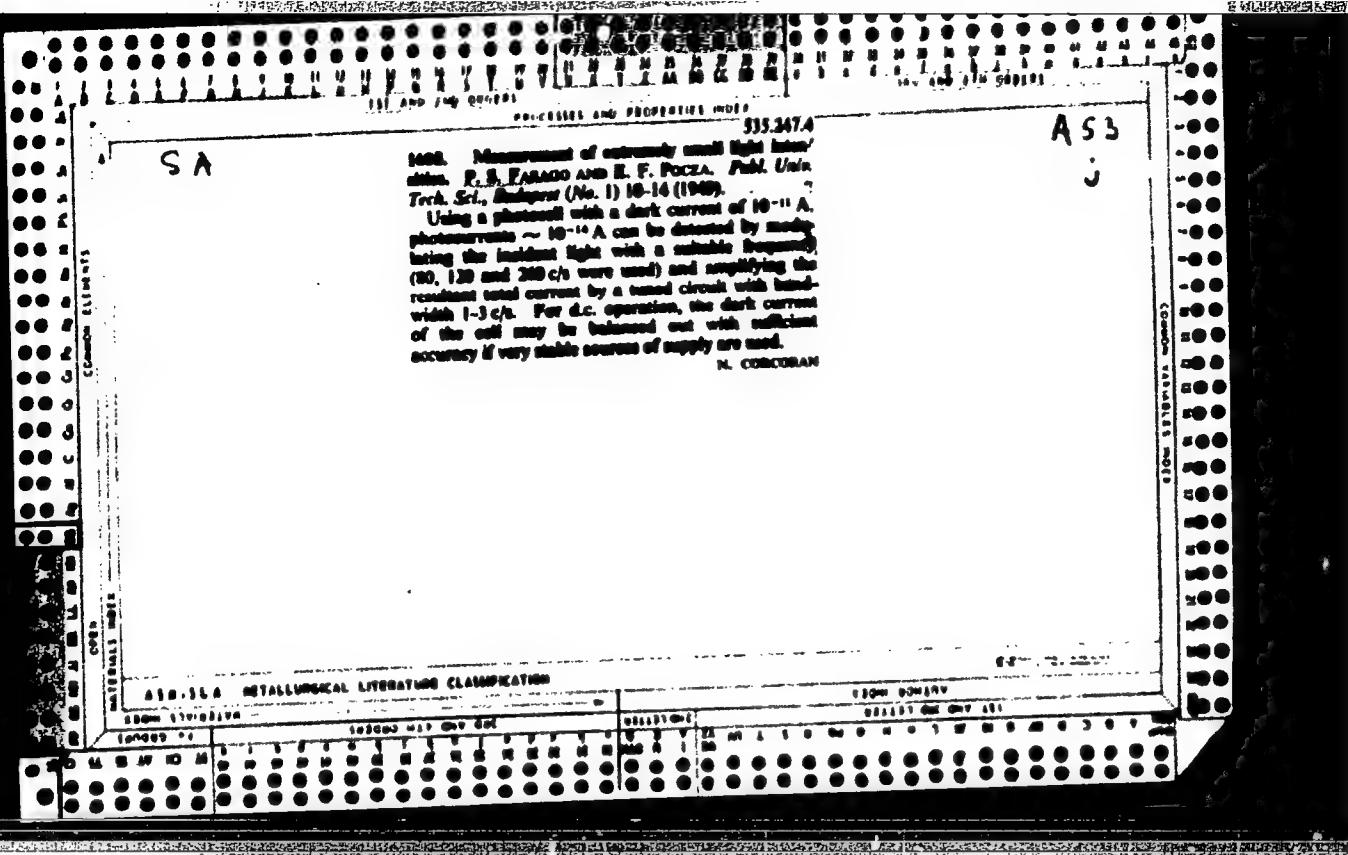   1. TV muszeresz, Orion Radio es Televizio Szerviz (for Kindler).

FARAGO, Pal

CR

The histamine treatment of allergic patients. Pál Faragó. *Orvosi Hetilap* 81, 945-6 (1937). — Clinical expds. since 1932 showed that doses of histamine beginning at 0.001-0.01 mg. and increasing every 2nd day usually has good effects. The healing effect probably is due to the acclimatization of the organism to free histamine.

S. S. de Pinálv

11G

FARAGO, Pal

Histamine-like substances in the blood of allergic subjects. Károly Hajos, Pál Farago, and Andor Balus. *Orvosi Hetilap* 89, 388 (HUNGARIAN).— The blood of allergic subjects contains at all times about twice as much histamine as normal. The histamine content of the blood seems to have no connection with the no. of eosinophil cells.
— S. S. de Finály

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

328. Electron multiplier tube of large effective cathode surface area. by
P. S. Farago. *Nature*, 161. p. 60. January 10. 1948.

Methods for increasing the effective surface of electron multiplier tubes for
particle counting are described. The effective surface may be increased by
projecting the electron-optical image of a cathode of large surface area on the
first multiplying electrode of a multiplier tube of the usual dimensions or by
increasing the length of all electrodes of a circular-type multiplier. The
development of the tube for the purpose of researches on cosmic radiation is go-
ing on.

PROCESSES AND PROPERTIES INDEX

535.247.4

SA

ASS

1468. Measurement of extremely small light intensities. P. S. FARAGO AND E. F. POCZA. *Publ. Univ. Tech. Sci., Budapest* (No. 1) 10-14 (1949).

Using a photocell with a dark current of 10^{-11} A, photocurrents $\sim 10^{-14}$ A can be detected by modulating the incident light with a suitable frequency (80, 120 and 300 c/s were used) and amplifying the resultant total current by a tuned circuit with bandwidth 1-3 c/s. For d.c. operation, the dark current of the cell may be balanced out with sufficient accuracy if very stable sources of supply are used.

N. CORCORAN

COMMON ELEMENTS

MATERIALS INDEX

METALLURGICAL LITERATURE CLASSIFICATION

Methods for measuring small light intensities. P. S. Farago. *Hung. Acta Phys.* 1, No. 6, 9 13(1949)(in English). – In the methods used, either the usual photocell is replaced by a multiplier phototube and the continuous photocurrent is measured after amplifying by electron tubes, or the single photons are counted by counting the no. of discrete orders of photoelectrons emitted by the cathode of the multiplier tube. For a given multiplier tube the limit of both methods is quantitatively the same, if the frequency band width in the former case, or if the period of counting in the latter case is properly chosen. The selective amplifier method has the advantage that by using 2 channels of the same band width, one tuned to the light modulation frequency, the other to a different one, photocurrent and noise can be detd. simultaneously. Multiplier phototubes with very small dark emission at room temp. were produced with the aid of photocathodes and multiplying dynodes which have a higher work function than that of the Ag-Cs-O Cs layer. Although the efficiency of the cathode is thereby somewhat reduced, such a multiplier tube was more suitable for measuring extremely small light intensities, especially in the blue region.   Istvan Fenaly
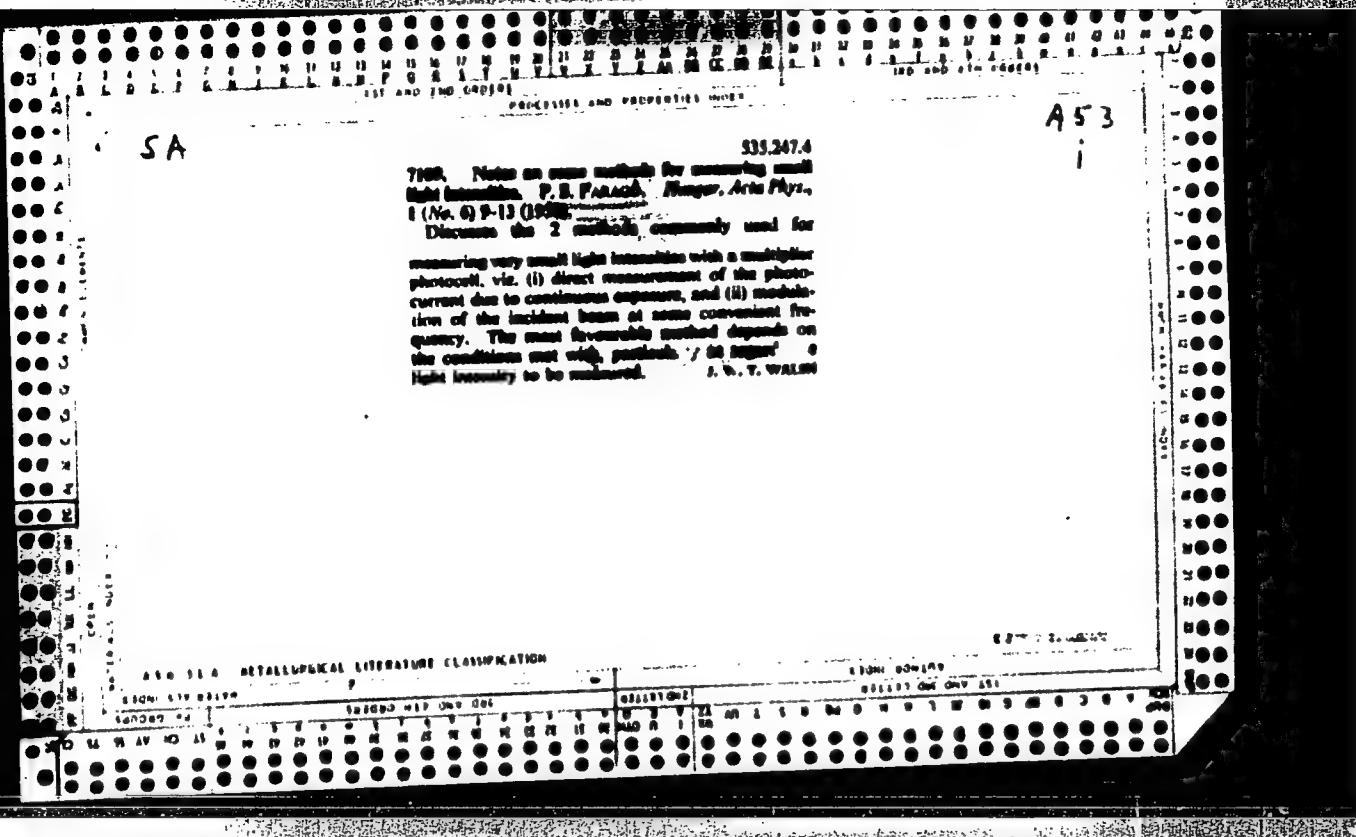
3

CA

Probability distribution of the number of secondary electrons. P. B. Faragó and L. Takács (Univ. Tech. Sci.,

Budapest, Hung.). *Hung. Acta Phys.* 1, No. 6, 43-52 (1949)(in English). —The probability distribution of the pulse amplitudes produced by single electrons in a $(b-1)$ and a b-stage electron multiplier tube is discussed, and a simple relation is derived for the generating functions of these distributions. Based on this relation a suitable method is given for the detn. of the probability distribution of the no. of secondary electrons released by 1 electron from a secondary emitting surface. The soln. of the problem is extended to the case of arbitrary primary particles. A special method is given for the detn. of the efficiency of multiplier tubes as electron counters.   István Finály

1957

SA

A53

335.347.4

7900.   Notes on some methods for measuring small light intensities. P. B. Farago, Ranger, Acta Phys., 1 (No. 6) 9-13 (19...)

Discusses the 2 methods commonly used for measuring very small light intensities with a multiplier photocell, viz. (i) direct measurement of the photocurrent due to continuous exposure, and (ii) modulation of the incident beam at some convenient frequency. The most favourable method depends on the conditions met with, particularly in regard to light intensity to be measured.   J. N. T. Walsh.

METALLURGICAL LITERATURE CLASSIFICATION

Hungary/Radiophysics - Superhigh Frequencies, I-11

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35391

    Author: Farago, Peter; Groma, Geza

Institution: None

    Title: Reflex Klystrons

Original
Periodical: Magyar tud. akad. Kozl. fiz. kutato intez. kozl. 1953, 1, No 1-2,
66-81; Hungarian

Abstract: See Referat Zhur - Fizika, 1955, 9786

Card 1/1

FARAGO, P. S

HUNG.

10423.   On the application of a simple magnetic resonance absorption device for quantitative measurements.   P S FARAGÓ, M. GÉCS AND J. MERTZ   *Acta phys Hungar*, 3, No 3-4, 359-33 (1954).

A specially simple nuclear resonance detector is obtained if the sample is in the resonant circuit of an oscillator and the power output is observed as a function of magnetic field.   The linearity of change of output with T′ is demonstrated.

FARAGO, P.S.

5221.   Reflex oscillators.   P. S. FARAGÓ AND G. GROMA. Acta phys. Hungar., 4, No. 1, 7-22 (1954). The mechanisms of reflex klystron and Barkhausen-Kurz oscillators were compared and found to be essentially similar.   Both are feedback oscillators, with one h.f. field producing the bunching of electrons and also converting (a fraction of) the kinetic energy of the electrons into h.f. power, with a feedback mechanism maintained by a constant retarding field. All the differences in the behaviour of the two types of oscillators can be explained by the fact that in the reflex klystron, the h.f. interaction space is separated from the constant retarding field, and in the Barkhausen–Kurz oscillator the two are superimposed. The main consequences are discussed quantitatively.

A.

FARAGÓ, P. S.

4

HUNG.

530.145 : 537.2.

10787. Quantum effects in the interaction between free electrons and electromagnetic fields. P. S. FARAGÓ AND G. MARX. *Acta phys. Hungar.*, 4, No. 1, 23-30 (1954).

An electron beam shot through a transverse r.f. field suffers a direction spread. If experimental conditions are suitably chosen, the direction spread seems to be due only to the quantum dispersion of energy exchange between free electrons and r.f. field. A simple collector electrode system might allow not only the detection of the direction spread of the electrons, but the presence of a quantum effect might be checked by plotting the collector current versus r.f. field amplitude, the plot for the quantum effect being different from those for classical effects.   A.

FARAGO, P. S.

6

/RM

2879

INVESTIGATION OF MAGNETIC MOMENTS OF ATOMIC
NUCLEI. P. S. Faragó, M. Gécs, and J. Mertz (Central
Research Inst. of Physics, Budapest). Nuovo cimento
(10) 2, 1110–13(1955) Nov.

   Measurements of the nuclear magnetic moments of Na^{23},
P^{31}, and F^{19} were repeated. The results are summarized
and compared with those of other authors. (B.J.H.)

②

Dmf

PM

FARAGO, P. S.

V 7216

PH

QUANTUM EFFECTS IN THE INTERACTION BETWEEN FREE ELECTRONS AND ELECTROMAGNETIC FIELDS.

P. S. Faragó (Central Research Inst. for Physics, Budapest, Hungary) and G. Marx (Physical Inst. of the Eotvos Univ., Budapest, Hungary). Phys. Rev. 99, 1063-4(1955) Aug. 15.

An electron beam shot through a transverse rf field may suffer a directional spread. If experimental conditions are suitably chosen, the directional spread may be due only to the quantum dispersion of energy exchange between free electrons and rf field. A simple collector electrode system might allow not only the detection of the directional spread of the electrons, but the presence of a quantum effect might be checked by plotting the collector current versus rf field amplitude, the plot for the quantum effect being different from those for classical effects. The results of various theoretical treatments of the effect are briefly compared, both from the point of view of their principal foundations and of the possibility of their experimental verification. (auth)

FARAGO, Peter

HUNGARY/Electronics - General.

Abs Jor   :   Ref Zhur - Fizika, No 6, 1959, 13444

Author   :   Farago, Peter
Inst   :   -
Title   :   Concerning on the Book by V.F. Vlasov "Electric Vacuum
               Devices"

Orig Pub   :   Magyar tud. akad. Mat. es fiz. tud. OSZT. kozl., 1956,
               6, No 2, 262-264

Abstract   :   The book is a translation of the second Russian edition
               (1949) and is used as a text for higher institutions of
               learning. The first 22 chapters have material of the
               course of lectures on electric vacuum devices, delivered
               be the author in the electrotechnical higher technical
               institutions for communication.

Card 1/1

P.S. FARAGO

4

Review of the experimental evidence for the law of variation of the electron mass with velocity. P. S. Faragó and L. Jánossy (Central Research Inst. Phys., Budapest, Hung.). Nuovo cimento [10], 5, 1411-38(1957)(in English).—F. and J. review the exptl. measurements which support the Lorentz equation for the variation of mass with velocity. Although all expts. are consistent with this law, they conclude that only the data on the fine structure of H-like spectra (Glitscher, C.A. 12, 1147) are sufficiently precise to distinguish between the Lorentz equation and that of Abraham, derived for a rigid electron (no reference given). — George L. Cunningham

AUTHORS: Zrelov, V. P., Tyapkin, A. A., Farago, P. S.   SOV/56-34-3-4/55

TITLE: Measurement of the Proton Mass at 660 MeV   (Izmereniye massy
             protonov pri energii ooo MeV)

PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1958,
             Vol. 34, Nr 3, pp. 555-558 (USSR)

ABSTRACT: The present work compares the values computed by means of the
             relativistic relation $m_2 = m_0 [1 - (v^2/c^2)]^{-1/2}$ based on the
             velocity measured with the values $m_1 = p/v$ of the mass which
             were determined from the measured momenta and velocities of
             protons. The measurements were made   on an external
             proton beam with about 660 MeV which made esseantially easier
             the determination of possible errors. The general scheme of
             the measuring device is shown in a diagram. The external
             beam of a 6 m-synchrocylotron passes a system of collimators,
             then was deflected within the field of an electromagnet with
             a pole diameter of 1 m, passed a second collimator and then
             impinged upon ionization chamber. The control measurements
             are also described. In the determination of the momentum of
Card 1/3   protons by means of a current carrying conductor the values

Measurement of the Mass of 66o MeV Protons   SOV/56-34-3-4/55

$Q = 300.0\pm 0.3$ and $I = 0.681\pm0.001$ amp. were obtained. Q de-
noting the load applied to a silk thread. From this the value
$p = 1296,5\pm2.3$ MeV/c is obtained for the momentum. Various
measurements carried out at $Q = 200,0$ g showed results which
coincide within the limit of measuring errors with earlier
obtained results. Various details of the measurements are dis-
cussed. Also the second correction of the energy loss in air
must be taken into account which amounts to $\Delta E_2 = 1,5$ MeV. The
total correction of the energy amounts to $\Delta E = \Delta E_1 + E_2 =$
$= 8.1$ MeV. The authors intend to determine the deviations
from the fundamental law of relativistic theory $m = m_0 [1-
-(v^2/c^2)]^{1/2}$, and use relativistic relations in the determi-
nation of the corrections ΔE and Δv. When the found values
for the momentum and velocity of the protons are taken into
account $m_1 = p/v = 1598.2 \pm 3$ MeV $/c^2$ and $m_2 = m_0 [1-(v^2/c^2)]^{-1/2}$
$= 1604.3 \pm 1.3$ MeV/c^2 are obtained. From this further results
$\Delta m = m_2 - m_1 = 6.1(1 \pm 0.5)$ or $\Delta m/m = 0,004(1 \pm 0.5)$. The er-
rors mentioned are the mean square deviations. Thus the re-
sults obtained here coincide with the relativistic law for the
increase of mass with increasing velocity within the error
Card 2/3   limits mentioned.

Measurement of the **Proton Mass** at 660 MeV   SOV/56-34-3-4/55

There are 1 figure and 9 references, 2 of which are Soviet.

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy
(United Institute for Nuclear Research)

SUBMITTED: September 12, 1957

Card 3/3

PATAKI, Pal, dr.; PANCSOVAY, Jozsef, dr.; FARAGO, Peter, dr.

Neurinoma of the extremity. Orv.hetil. 102 no.4:174-175 22 Ja'61.

1. Fovarosi Arpad Korhaz, Sebeszeti Osztaly.
        (NEUROMA case reports)
        (EXTREMITIES neopl)

FARAGO, Stefan

. Planning of train service and its performance. Zel dop tech 12 no.9:241-242 '64.

1. Dispatcher, SVD.

L 47531-66 EWR/j: RM

ACC NR: AT6035004   SOURCE CODE: HU/2502/66/047/002/0173/0184

AUTHOR: Szoke, Sandor--Seke, Sh. (Doctor) and Farago, Terez, of the Central Research Institute for Chemistry at the Hungarian Academy of Sciences in Budapest.

"Calculation of the Force Field on the Ethylene Model"

Budapest, Acta Chimica Academiae Scientiarum Hungaricae, Vol 47, No 2, 1966, pp 173-184.

Abstract: [English article; authors' English summary] The force constants of the ethylene molecule have been calculated. Fourteen equations were used to calculate eleven force constant components applying the method of least squares. In the calculation of the constants of the stretching vibrations, the force constants of diatomic molecules were used as approximative values. By this procedure the relationship of the force constants with the applied empirical data has been established. Orig. art. has: 2 figures, 16 formulas and 6 tables. [JPRS: 36,002]

TOPIC TAGS: ethylene, molecular physics

SUB CODE: 07,20 / SUBM DATE: 22 Jul 65 / ORIG REF: 001 / OTH REF: 019
SOV REF: 004

Card 1/1

0921 1517

FARAGÓ, T.

Faragó, T. Über das arithmetisch-geometrische Mittel. Publ. Math. Debrecen 2, 150–156 (1951).

The arithmetic-geometric mean of two positive numbers a_0, b_0 is the common limit $M(a_0, b_0)$ of the two sequences $\{a_n\}$, $\{b_n\}$ generated by $a_{n+1} = \frac{1}{2}(a_n + b_n)$, $b_{n+1} = (a_n b_n)^{\frac{1}{2}} > 0$. For these sequences, we have

$$(*) \qquad b_n \leq b_{n+1} \leq M(a_0, b_0) \leq a_{n+1} \leq a_n.$$

For complex numbers a_0, b_0, the author now considers the same sequences, except that now the condition $b_{n+1} > 0$ is generalized to the restriction that b_{n+1} lie in the angle $\alpha_{n+1} = \angle(a_n, 0, b_n)$, with $0 \leq \alpha_n \leq \pi$. Clearly we do not now necessarily have $|b_n| \leq |a_n|$; nevertheless, the following analogue of $(*)$ is given:

$$|b_n| \cos \tfrac{1}{2}\alpha_n \leq |b_{n+1}| \cos \tfrac{1}{2}\alpha_{n+1}$$
$$\leq |M(a_0, b_0)| \leq \tfrac{1}{2}[|a_n| + |b_n|] \leq \tfrac{1}{2}[|a_{n+1}| + |b_{n+1}|].$$

Also, necessary and sufficient conditions on (a_0, b_0) and (a_0', b_0'), in order that $|M(a_0, b_0)| \leq |M(a_0', b_0')|$, are given.   *E. F. Beckenbach* (Los Angeles, Calif.).

Source: Mathematical Reviews,   Vol 13 No. 10

FARAGO, TIBOR

Faragó, Tibor. Contribution to the definition of group. Publ. Math. Debrecen 3 (1953), 133–137 (1954).

Let G be a system of elements in which a single-valued binary multiplication is defined. Suppose G contains a unit element and that every element of G has a left inverse. If, in addition, G is associative, then G is a group. The author considers fifteen substitutes for the associative law, which are obtained by changing the position of the brackets and/or permuting the three elements a, b, and c in the right member of $(ab)c = a(bc)$. The associative law in G is replaced in turn by each of these fifteen substitutes. Nine of the resulting systems are commutative groups, three others are commutative systems not necessarily groups, while the remaining three (one of which is necessarily a quasigroup) need be neither commutative or associative.   D. C. Murdoch.

FARAGO T.

2

1. Determination of higher order partial derivatives of the velocity function from known values along an airfoil. (In English) M. Blahó, T. Faragó. *Acta Technica Academiae Scientiarum Hungaricae*, Vol. 16, 1957, No. 3—4, pp. 363—370

In one of their papers, Chung Hua Wu and Curtis A. Brown computed the velocity field from the known velocity distribution past an airfoil by the Taylor polynomial. They determined the first and second partial derivatives of the velocity function and pointed out that the method suggested by them permitted the determination of the partial derivatives of higher order as well. However they failed to furnish any further particulars on the subject. In this paper the n-th partial derivatives have also been determined and the formulae obtained have been verified by complete induction. If the components of velocity are denoted by $u(x, y)$ and $v(x, y)$, the density by ϱ and provided that g is a streamline following the equation $y = v(x)$, the following:

$$0 + y^n \left(\frac{\partial^{n+1} \varrho}{\partial y^{n+1}}\right)_g - \frac{d}{dx}\left(\frac{\partial^{n-1} u \varrho}{\partial y^{n-1}}\right)_g + y \sum \binom{n}{k} \left[\cdots \binom{1}{k} \right]_g \cdots$$

$$(1+y^n)\left(\frac{\partial^{n} v \varrho}{\partial y^{n}}\right)_g - y \frac{d}{dx}\left(\frac{\partial^{n-1} \varrho}{\partial y^{n-1}}\right)_g - \sum_{k=1}^{n} \binom{n}{k}\left[\frac{\partial^{m} u}{\partial y^{m}} \varrho \binom{1}{c}\right]_g \frac{d}{dx}\left(\frac{\partial^{n-1}}{\partial y^{n-1}}\right) \right\}$$

Distr: 4F1

1. Determination of higher-order partial derivatives of the velocity function from known values along a stream surface. (In English) T. Páráuó. Acta Technica Academiae Scientiarum Hungaricae. Vol. 20, 1958, No. 3—4, pp. 217—227.

The formula of the nth derivatives is deduced and verified assuming the velocity distribution on the stream surface $r(u_1, u_2)$ to be known. The nth partial derivatives in a system of cylindrical co-ordinates are also given. Certain principles concerning the analytical specification of velocity components on known stream surfaces are established.

FARAGO, T. (Budapest, XI., Sztoczek u.2-4)

An elementary method for an approximate determination of the
real roots of algebraic equations. Periodica polytechn electr
7 no. 3:197-208 '63.

1. Lehrstuhl fur Mathematik Tec___ __ _ Univer___ ___ _____,
   __ _legt von Dr.E.Makai.

FARAGO, Tibor, dr.   (Budapest, XI., Sztoczek u.2-4)

Studies on polynomials with one or more variables. Periodica
polytechn electr 8 no.2:193-206 '64.

1. Lehrstuhl fur Mathematik, Technische Universitat, Budapest.
Vorgelegt von Prof. Dr.I. Fenyo.

FARARO, V.I.

Rapid method of repairing open-hearth furnaces. Metallurg 10 no.7:
29   Jl '65.   (MIRA 18:7)

1. Nachal'nik otdela tekhnicheskoy informatsii Taganrogskogo
metallurgicheskogo zavoda.

FARAKHOLOV, A.A.

"Correction of Off-shore oil Extraction Structures and Catode protection."
(Korroziya Morskikh Neftepromyslovykh Sooruzhenii i Katodnya zashchita.)
Baku, Aznefteizdat, 1955.

FARAMAZOV, SAYRAN ARUTYULOVICH

GUSEYNOV, Dzhebrail Alekper ogly; FARAMAZOV, Sayran Arutyulovich; SPEKTOR,
    Sh.Sh., red.; AL'TMAN, T.B., red. izd-va.

[Technology and mechanization of the production of petroleum bitumen]
Tekhnologiia i mekhanizatsiia proizvodstva neftebitumov. Baku,
Azerbaidzhanskoe gos.izd-vo neft.i nauchno-tekhn.lit-ry, 1957. 180 p.
                                            (MIRA 11:1)

        (Petroleum)   (Bitumen)

FARAMAZOV, S. A., Cand Tech Sci (diss) -- "The problem of mechanizing laborious processes in the production of high-melting bitumen". Baku, 1960. 10 pp (Min Higher and Inter Spec Educ USSR, Azerb Order of Labor Red Banner Inst of Petroleum and Chem im M. Azizbekov), 150 copies (KL, No 12, 1960, 128)

FARAMAZOV, Seyran Arutyunovich; CHIZHOV, A.A., ved. red.;
DEM'YANENKO, V.I., tekhn. red.

[Complete mechanization and automation of the production
of solid oil asphalt] Kompleksnaia mekhanizatsiia i avto-
matizatsiia proizvodstva tverdykh neftianykh bitumov. Le-
ningrad, Gostoptekhizdat, 1963. 122 p. (MIRA 16:10)
(Asphalt)

FARAMAZOV, S.A.; ABDULOVA, Z.M.

Efficient positioning of return bend chambers in pipestills.
Mash. i neft. obor. no.8:23-24 '64. (MIRA 17:11)

1. Bakinskiy neftepererabatyvayushchiy zavod im. XXII s"yezda
Kommunisticheskoy partii Sovetskogo Soyuza.

FARAMAZOV, S.A.; KOSENKOV, V.G.; AKHMEDOV, K.R.

Stabilizing the draft of pipestill flues. Nefteper. i neftekhim.
no.4:45-47 '65.   (MIRA 18:5)

1. Bakinskiy neftepererabatyvayushchiy zavod im. XXII s"yezda
Kommunisticheskoy partii Sovetskogo Soyuza.

FARAMAZOV, S.A., kand. tekhn. nauk; GINZBURG, M.B., inzh.; PIRUMYAN, M.Ye.,
inzh.; TSOYREF, M.I., inzh.

Mechanization of the cutting of a high-viscosity polymer. Mekh.
i avtom. proizv. 19 nc.10:11-12 O '65.   (MIRA 18:12)

KARAMYAN, K.A.; FARAMAZYAN, A.S.

Mineralization phases of the Kadsharan copper and molybdenum
deposit. Izv. AN Arm. SSR. Geol. i geog. nauki 13 no.3/4:65-88
'60.   (MIRA 13:9)

1. Institut geologicheskikh nauk AN ArmSSR.
      (Kadsharan region (Armenia)--Mineralogical chemistry)

MELIKSETYAN, B.M., FARAMAZYAN, A.S., KHURSHUDYAN, E.Kh.

Tellurobismuthite and certain other tellurides from the Kaler molybdenite deposit. Dokl.AN Arm.SSR 30 no.4:239-244 '60.
(MIRA 13:8)

1. Institut geologicheskikh nauk Akademii nauk ArmSSR. Predstavleno akad. AN Armyanskoy SSR I.G.Magak'yanom.
(Megri District--Tellurides)

S/081/61/000/022/015/076
B102/B108

AUTHOR: Faramazyan, A. S.

TITLE: Lawfulness of rhenium distribution in ores from
             Kadzharan

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1961, 97, abstract
             22G108 (Izv. AN Arm.SSR. Geol. i geogr. n., v. 14, no. 1,
             1961, 39-56)

TEXT: Re in molybdenites was determined colorimetrically according to the
color of its rhodanide complex. Mo was previously separated by Hg(1+)
nitrate or ascorbic acid. The Re contents in molybdenites in the
following stages of mineralization are presented (in 10^{-2} %): 1) Quartz-
magnetite (2.6-3.0), 2) quartz-field spar (3.4-4.1), 3) quartz-
molybdenite (3.4-4.9, average 3.21), 4) quartz-chalcopyrite-molybdenum
(3.0-16.1, average 7.39), 5) quartz-chalcopyrite (2.2-3.2, average 2.78),
6) quartz-pyrite (3.0-3.7, average 3.27). Just like molybdenite which is
segregated mainly in the 3rd (70 %) and 4th (15 %) stages, also the main
mass of Re is segregated in these stages: 61.2 and 30 2 %, respectively.

Card 1/2

Lawfulness of rhenium distribution...   S/081/61/000/022/015/076
                                             B102/B108

The Se and Te contents were also determined in these molybdenites by
semiquantitative spectroscopical and chemical methods. A diagram is
given which shows that the Se content increases with increasing Re
content. This is explained by a geochemically similar behavior of these
elements. The Mo and Re contents of some other sulfides are also given;
the Mo:Re-ratio is the same as in the molybdenites. This leads to the
assumption that Re in sulfides is due to mechanical molybdenite
admixtures. A comparison of the Mo:Re ratios in molybdenite (2000:1),
in powellite (10^5:1), and in mine water (200:1) shows that Re is removed
from the oxidation zone. [Abstracter's note: Complete translation.]

Card 2/2

FARAMAZYAN, A.S.; KHACHHUDYAN, E.Kh.

Enargite and luzonite from the Kadzharan copper-molybdenite deposit.
Zap.Arm.otd.Vses.min.ob-va no.2:5-17 '63.   (MIRA 16:10)

FARAMAZYAN, A.S.; AKOPYAN, A.G.

Rhenium and some molybdenum ore manifestations in the Ayotsdzor ore region. Izv.AN Arm. SSR. Geol.i geog.nauki 16 no.3:61-66 '63.

(MIRA 17:2)

1. Institut geologicheskikh nauk AN Armyanskoy SSR.

MAGAK'YAN, I.G., akademik; PIDZHYAN, G.O.; FARAMAZYAN, A.S.

Rhenium in copper-molybdenum deposits of the Armenian
S.S.R. Dokl. AN Arm. SSR 37 no.2:77-81 '63.   (MIRA 17:2)

1. Institut geologicheskikh nauk AN Armyanskoy SSR.
Akademiya nauk Armyanskoy SSR (for Magak'yan).

FARAMAZYAN, A.S.; KHURSHUDYAN, E.Kh.

Isomorphism between molybdenum and rhenium in molybdenites.
Dokl. AN Arm. SSR 37 no.4:211-216 '63.   (MIRA 17:8)

1. Institut geologicheskikh nauk AN ArmSSR. Predstavleno aka-
demikom AN Armyanskoy SSR I.G. Magak'yanom.

FARAMAZYAN, R.

American "aid" and Turkish finances. Fin.SSSR 20 no.8:
81-89 Ag '59.   (MIRA 12:11)
        (Turkey--Economic assistance--American)
              (Turkey--Finance)

FARAMAZYAN, Rachik Artashesovich; SAMYKIN, S., red.; RODIONOVA, L., mlad. red.; NOGINA, N., tekhn. red.

[Economy of present-day Canada] Ekonomika sovremennoi Kanady. Moskva, Sotsekgiz, 1963. 222 p.   (MIRA 16:10)
            (Canada—Economic conditions)

KILESSO, A.I.; FARAMAZYAN, R.A.; KONONYUK, B.Z.; MARTINSEN, Z.A.;
    ANDREYEV, Yu.V.; SLAVIN, S.V.; RUSETSKIY, S.B.; GLUSHKOV,
    V.P., otv. red.; PLISKINA, Ye.M., red.; TIKHOMIROVA, S.G.,
    tekhn. red.

[The shipbuilding industry of capitalist countries] Sudo-
stroitel'naia promyshlennost' kapitalisticheskikh stran.
Moskva, Izd-vo AN SSSR, 1963. 471 p.   (MIRA 16:10)

1. Akademiya nauk SSSR. Institut mirovoy ekonomiki i mezh-
dunarodnykh otnosheniy.
                         (Shipbuilding)

FARAN, Antonin, inz.

Automatic recorder in railroad stations. Zel dop tech 11
no.3:85-86 '63.

FARANA, J.

Wstępna kontrola gospodarki materiałowej (Preliminary control of material economy), by J. Farana. Reported in Nas Łoobs, (Nowe Isioski), No. 6, March 15, 1956.

FARAPONOVA, E.A.

Meeting on psychological problems of industrial education and training in the school. Vop.psikhol. 7 no.2:188-189 Mr-Ap '61.
(MIRA 14:6)

(Work)

ZAPOROZHETS, A.V. (Moskva); FARAFONOVA, E.A. (Moskva)

Work of the Moscow Section of the Society of Psychologists in
1960-1964. Vop. psikhol. 11 no.2:189-190 Mr-Ap '65.

(MIRA 18:6)

FARAPONOVA, G.P.

Some results of actinometric observations from free aerostats.
Trudy TSAO no.8:27-35 '52.   (MIRA 12:1)
        (Aeronautics in meteorology) (Solar radiation)

124-58-9-10068

AUTHORS: Faraponova, G. P., Kastrov, V. G.

TITLE: Actinometric Observations in the Lower Troposphere Above
             Kyzyl-Kumami (Aktinometricheskiye nablyudeniya v nizhney
             troposfere nad Kyzyl-Kumami)

PERIODICAL: Tr. Tsentr. aerolog. observ., 1954, Nr 13, pp 27-37

ABSTRACT: Aircraft-borne actinometric observations were performed
             above Kyzyl-Kumami and the Mountain District of Turkestan
             during April and May of 1951. The measurement comprised
             the intensity of the incoming (downward) and outgoing (upward)
             fluxes of shortwave radiation, the intensity of the direct and
             scattered radiation, and the basic meteorological elements.
             The observations were performed at elevations of 0.5, 1.5,
             3.0, and from 4 to 5 km. Twelve flights were carried out in
             all. Data analysis showed that the density of the downward
             flux increases at all times with increasing elevation; the ver-
             tical gradient of this quantity against elevation, in general,
             decreases with elevation. The density of the upward flux
Card 1/2   varies without any definite trend up to the 1.5-km level and

124-58-9-10068

Actinometric Observations in the Lower Troposphere (cont.)

increases above that level. Both the intensity of the absorption of the insola-
tion and the radiational heating of the air decrease with increasing elevation;
the decrease is most pronounced at the 3-km level and near the ground sur
face. The values of the flux density of the direct and scattered (clear-sky)
radiation above Kyzyl-Kumami are close to the values observed at corresponding
elevations in the mountainous area. The albedo of the desert surface and of
the air layer lying between the aircraft and the ground surface increases with
decreasing angular elevation of the sun above the horizon. This, apparently,
is governed by the properties of the desert surface but not by those of the inter-
jacent air layer. The character of the change in albedo with elevation depends
on the ratio between the processes of absorption and scattering of the radia-
tion in the air layer interceding between the aircraft and the ground surface.

L. I. Mamontova

1. Radioactivity--Measurement   2. Atmosphere--Radioactivity

Card 2/2   ·

LASTROV, V.G.; FARAPONOVA, G.P.

    Radiation errors of a platinum resistance thermometer. Trudy TSAO
    no.16:18-20 '56.   (MLRA 9:11)
        (Atmospheric temperature) (Thermometers)

FARAPONOVA, G.P.

Measuring the weakening factor of sunlight in the atmosphere.
Trudy TSAO no.23:52-62 '57.   (MIRA 11:5)
         (Atmosphere) (Photometry) (Solar radiation)

PARAPONOVA, G.P.

Measuring the weakening of sunlight in the free atmosphere.
Trudy TSAO   no.32:3-16   '59.   (MIRA 12:12)
        (Atmospheric transparency)

S/169/61/0
D228/D304

$\cdot \cdot \cdot /036/065$

3,5150

AUTHOR: Faraponova, G. P.

TITLE: Measuring the weakening of sunlight in the free atmosphere

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 11, 1961, 26-27, abstract 11B193 (Tr. Tsentr. aerol. observ., no. 32, 1959, 3 - 16)

TEXT: The index of the weakening of sunlight was determined from measurements of direct solar illumination at different altitudes in the atmosphere during aircraft flights to a height of 6.5 km. The observations were conducted with an electrophotometer in which a ФЭУ-19 (FEU-19) photomultiplier was used as the radiation receiver. Interference filters with passage maxima of 420. 452. 496. and 550 mμ were employed in the equipment. The observations were made in the North Caucasus and in the Khar'kov region in 1957 and in the Moscow region in 1958. On comparing the data obtained in the free atmosphere and in mountainous terrain it was found that the weaken-

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32278

S/169/61/000/011/036/065
D228/D304

Measuring the weakening of ...

ing of light is somewhat greater in the free atmosphere than in the
mountains. The optical densities obtained for the free atmosphere
also have larger values. It was discovered that the turbidity of
the air in the near-surface layer up to 1 km very rapidly dimini-
shes with altitude. A layer with a comparatively constant turbidi-
ty from 1 to 3 km is very often observed in summertime; the upper
boundary of this layer usually reached the inversion level. Above
3 km the index of weakening declines almost exponentially with al-
titude. In the lower layers of the troposphere (up to 3 - 4 km) di-
lution by aerosols plays a leading role in the values of the index
of weakening; at greater heights (from 3 - 4 to 6.5 km) the molecu-
lar component equals, or becomes somewhat larger than the aerosol
component. In the summer period in the lower layers (up to 4 km)
the indices of weakening have somewhat higher values in steppe dis-
tricts (in North Kazakhstan and the North Caucasus) than in the
central part of the Union's European territory (in the Moscow and
Khar'kov regions). Observations in the free atmosphere, carried out
in West Germany by U. Krug-Pielsticker (Ber. Dtsch. Wetterdienst,
no. 8, 1949) and in England by I.M. Waldram (Quart. J. Roy. Meteo

Card 2/3

3,5150

S/169/62/000/003/048/098
D228/D301

AUTHOR: Faraponova, G. P.

TITLE: The weakening of sunlight in the free atmosphere (Theses)

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 3, 1962, 27, abstract 3B215 (V sb. Aktinometriya i atmosfern. optika, L., Gidrometeoizdat, 1961, 145-146)

TEXT: Measurements were made in an aircraft by means of special photometers at different points in the USSR in 1956-1958. In the troposphere's lower layers from 0 to 1 km the atmospheric turbidity rapidly diminishes. Above 3 - 4 km the index of weakening decreases almost exponentially with altitude, as do the aerosol and the molecular components of the index of weakening, too. The atmosphere's optical densities at a height of 6.5 km exceed the Rayleigh values, indicating considerable turbidity in the troposphere's lower layers. /¯Abstracter's note: Complete translation._7

Card 1/1

ENCL: ES

OTHER.   OTHER

Card 2/2

ACCESSION NR: AP4034796   S/0293/64/002/002/0257/0265

AUTHOR: Malkevich, M. S.; Malkov, I. P.; Pakhomova, L. A.; Rozenberg, G. V.; Faraponova, G. P.

TITLE: Determination of the statistical characteristics of radiation fields over clouds

SOURCE: Kosmicheskiye issledovaniya, v. 2, no. 2, 1964, 257-265

TOPIC TAGS: meteorology, cloud, atmospheric radiation, radiation field

ABSTRACT: A study has been made of the possibility of applying statistical analysis to fields of outgoing radiation for determining the structure of cloud formations. Computation of the structural parameters of the cloud cover is accomplished using aircraft measurements of radiation with narrow- and wide-angle instruments. The following conclusions are drawn from this preliminary investigation: 1. Statistical characteristics of the intensity of reflected radiation can be used for an objective analysis of clouds of various types and a reliable identification can be made on the basis of the full set of statistical parameters. 2. The most informative parameter is the spectral density of fluctuations of brightness, which is quite sensitive to a difference in the character of nonhomogeneities of different cloud types and at the same time is statistically stable. 3. An investi-

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ACCESSION NR: AP4034796

gation of the statistical characteristics of radiation fluxes, considered as ran-
dom functions, makes it possible to take into account fluctuations of the radiant
flux of heat under conditions of arbitrary cloudiness. In this case spectral
density makes it possible to obtain the distribution of radiant energy by fre-
quencies and determine those scales of nonhomogeneities which make the principal
contribution to the flux of radiation heat. 4. The spectrum of fluctuations is
similar to comparable spectra of fluctuations of wind velocity and temperature ob-
tained in investigations of turbulence in the surface layer of the air. The spec-
trum was displaced into the region of somewhat lower frequencies, evidence of an
increase in the scales of the eddies responsible for the nonhomogeneity of cloud
formations. Orig. art. has: 10 formulas, 6 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 23Dec63

SUB CODE: ES

DATE ACQ: 20May64

NO REF SOV: 009

ENCL: 00

OTHER: 003

Cdrd 2/2